

MEC Range

Mini Electrochemical Cell
Toxic Gas Sensor Range



KEY FEATURES

IP65 enclosure - totally dust tight and protected against low-pressure water jets

Integral pressure sensor - providing compensation for the effects of atmospheric pressure

Digital communication (via RS485) - sensor can be mounted remotely from monitoring equipment

Available in a wide range of gas variants

Long life sensor - lasts up to 50,000 hours

Easily integrated into larger gas management systems

Analox's MEC family is the world's most extensive range of toxic OEM gas sensors providing a digital output.

INDUSTRIES



Manufactured
in Great Britain

PROVIDING NICHE CUSTOM
GAS DETECTION SINCE 1981

ANALOX
Sensor Technology

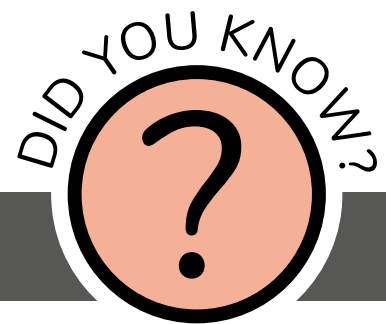
The MEC range offers a comprehensive assortment of robustly housed, cost-effective, digital toxic gas sensors, designed for original equipment manufacturer (OEM) systems. Our sensors are highly accurate, compact and versatile and have a long life expectancy, ideal for integrating into your breathing air system.

The sensor range is available in a range of gas variants including CO, O₂, VOC and He, all providing an RS485 output using Analox protocol.

Analox realise that not all customers require a complete monitoring solution and prefer to integrate sensors into their own system, our range of sensors have been designed for this. The MEC sensor range is ideal for this requirement if digital inputs are required. It is small enough to be integrated almost anywhere. Each housing has a gas port and using a simple flow adapter they can easily be installed in series in the gas path. An integral pressure sensor provides compensation for the effects of atmospheric pressure where appropriate.

We also use MEC digital sensors in our own products, including the ACG+.

Note: If you wish to monitor sub-ppm levels of gas, the TEC range is also available.



SPECIFICATIONS

MEC O₂

Range: 0 to 100% (atmospheric pressure), 0 to 3000 mbar (hyperbaric)

Temperature range: -5 to 55 °C (23 to 131 °F)

Accuracy (over ±10 °C): ±(0.035% O₂ + 1% of reading + temperature coefficient),
temperature coefficient = 0.4% of reading/°C or 0.22% of reading/°F

Detection mode: electrochemical

Sensor life: 2 years for the electrochemical cell in atmospheric air

Supply voltage: 5.0 V DC (±0.5 V)

Generic

Data output:

RS485 using Analox protocol

Enclosure dimensions:

65 x 50 x 35 mm
(H x W x D)

MEC CO (0 to 20 ppm range)

Range: 0 to 20 ppm

Temperature range: -5 to 55 °C (23 to 131 °F)

Accuracy (over ±10 °C): ±(1 ppm CO + 5% of reading + temperature coefficient),
temperature coefficient = 0.1 ppm CO/°C + 0.5% of reading/°C or 0.056ppm CO/°F + 0.278% of reading/°F

Detection mode: electrochemical

Sensor life: 2 years in operation

Supply voltage: 5.0 V DC (±0.5 V)

*Following a calibration as described in the user manual.

MEC He

Range: 0 to 100%

Temperature range: -5 to 55 °C (23 to 131 °F)

Accuracy: ±(2% FS + temperature coefficient),
temperature coefficient = 0.05% FS/°C or 0.028% FS/°F

Detection mode: pellistor

Sensor life: up to 5 years

Supply voltage: 5.0 V DC (±0.1 V)

MEC VOC

Range: 0 to 100 ppm

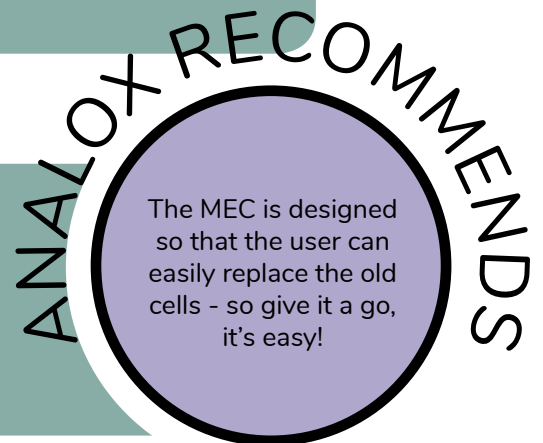
Temperature range: -5 to 55 °C (23 to 131 °F)

Accuracy: ±(1 ppm VOC + 5% of reading + 0.25% of reading °C),

Detection mode: Analox MEC intelligent PID sensor

Sensor life: Lamp - 5,000 hours (~6 months), Cell - 50,000 hours (~5 years),

Supply voltage: 5.0 V DC (±0.5 V)



Analox has a policy of continuous improvement and we reserve the right to upgrade or change specifications without prior notice.

Full technical specifications are available upon request and can be found in the User Manual.

If you require a datasheet in another language please contact us.

www.analoxsensortechnology.com



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